

KEY TO THE NORTH AMERICAN SPECIES OF
AGROMYZA RELATED TO *SIMPLEX*
LOEW (DIPTERA).

BY J. R. MALLOCH, URBANA, ILL.

The species in this group are distinguished from their allies by the following combination of characters: Body entirely black, with sometimes a metallic bluish or greenish tinge, halteres black, costa ending at or slightly beyond apex of third vein.

Only five species are known to me, one of which is undescribed.

KEY TO SPECIES.

1. Mesonotum with 3 pairs of dorso-centrals.....2
Mesonotum with 2 pairs of dorso-centrals.....3
2. Orbits distinctly shining; 5 pairs of orbitals present; anterior pair of dorso-centrals weak. Larvæ in twigs of willow. N. Y.; Ill.....*salicis* Malloch.
Orbits opaque; 7 pairs of orbitals present; all 3 pairs of dorso-centrals strong. Food-plant unknown.....*tamia* Melander.
3. Abdomen with a distinct bluish tinge; cheek almost linear, not over one-eighth as high as eye. Food-plant unknown. Md.....*winnemanae* Malloch.
Abdomen glossy black, or at least without bluish tinge; cheek about one-fourth as high as eye.....4
4. Outer cross-vein about half its own length from inner; wings barely more than twice as long as broad; frontal and facial orbits glossy. Larvæ mining in stems of asparagus. N. J.; N. Y.; Va.; Ill.; Europe.....*simplex* Loew.
Outer cross-vein at its own length from inner; wings about 2.5 times as long as broad; frontal orbits very slightly shining, facials opaque. Food-plant unknown.
Ill.....*similata* Malloch.

Male.—Black; head opaque, orbits and triangle slightly shining, thorax and abdomen distinctly shining. Wings clear, veins black. Squamæ fuscous, fringes black. Halteres black.

Frons over one-third the width of head; ocellar triangle poorly defined, extending almost to anterior margin of frons; posterior

ocelli separated by nearly twice the distance between anterior and posterior ocelli; orbits narrow, about one-sixth as wide as interfrontalia; orbital bristles short, 4 in number, hairs weak and sparse; antennæ small, third joint rounded in front; arista bare, slightly swollen and pale at base, its length slightly greater than anterior width of frons; cheek one-fourth as high as eye, marginal hairs weak, more numerous anteriorly, vibrissa weakly differentiated. Mesonotum with 2 pairs of dorso-centrals; discal setulæ becoming sparse posteriorly and not continued to posterior dorso-centrals; prescutellars absent; basal pair of scutellars stronger than apical pair. Apical abdominal segment 2.5 times as long as preceding segment; hypopygium larger than in allied species. Legs rather slender; mid tibiæ with very weak posterior setulæ. Inner cross-vein below apex of first; outer cross-vein at its own length from inner; apical sections of third and fourth veins slightly divergent apically; ultimate section of fourth vein about six times as long as penultimate; last section of fifth vein about four-fifths as long as preceding section; sixth vein very distinct, ending at one-third from margin of wing.

Length 2 mm.

Type locality, Dubois, Ill., May 24, 1917 (J. R. Malloch).

Food-plant unknown.

BOOK NOTICE.

BIOLOGY OF THE MEMBRACIDÆ OF THE CAYUGA LAKE BASIN.

By W. D. Funkhouser, Memoir 11, Cornell University Agricultural Experiment Station. Pp. 177-445, 44 plates. Ithaca, N.Y., June, 1917.

In this study Mr. Funkhouser has given us a valuable summary of his work on the Membracid fauna of the Cayuga Lake Basin, together with an excellent introduction to the general study of this attractive family.

The first part of the paper contains a useful general description of the geology, physiography and climatology of the district, and its characteristics as a faunal and floral area, followed by an account of the local Membracid fauna, the distribution of which